

CLAIM SET AS AMENDED

1. (currently amended) A stereophonic sound field reproducing apparatus for reproducing a stereophonic sound field, the apparatus comprising:

a plurality of sound wave output units arranged around each ear ~~of a head~~ of a user at the time of using, each of the sound wave output unit receives signals and outputs sound waves; and

a first signal processing unit which processes signals to be supplied to the sound wave output units ~~so as to simultaneously~~ correct the signal based on ~~the~~ characteristics between the sound wave output units and the ear head of the user ~~and the characteristics between the sound wave output units,~~

wherein the characteristics include cross-talk components at a plurality of positions between the ear of the user and the sound wave output units.

2. (currently amended) The stereophonic sound field reproducing apparatus according to claim 1, further comprising a holding unit, to be attached to a ~~[[the]]~~ head of the user at the time of using, which holds the sound wave output units at the circumference of the head of the user.

3. (currently amended) A stereophonic sound field reproducing apparatus for reproducing a stereophonic sound field, the apparatus comprising:

a plurality of sound wave output units arranged around a head of a user at the time of using, each of the sound wave output unit receives signals and outputs sound waves; and

a first signal processing unit which processes signals to be supplied to the sound wave output units ~~so as to simultaneously~~ correct the signal based on ~~[[the]]~~ characteristics between the sound wave output units and the ear ~~head~~ of the user ~~and the characteristics between the sound wave output units,~~

wherein at least four sound wave output units are provided,  
[[and]]

wherein the four sound wave output units are arranged in the vicinity of the ears of the user in such a manner that at least two sound wave output units are provided in the vicinity of each ear, and

wherein the characteristics include cross-talk components at a plurality of positions between the ears of the user and the sound wave output units.

4. (currently amended) The stereophonic sound field reproducing

apparatus according to claim 1, further comprising a plurality of detection units, arranged in positions or their vicinities where a relationship with a head of human body or a head of simulation units simulating human body is the same as a relationship between the head of the user and the positions ~~sound wave output units~~ at the time of recording, which detect a sound field and generate signals to be supplied to the sound wave output units.

5. (currently amended) The stereophonic sound field reproducing apparatus according to claim 1, further comprising a second signal processing unit which executes a process on the signals to be supplied to the sound wave output units using characteristics from a position where a sound image is fixed to the positions between the ears of the users and ~~vicinities of~~ the sound wave output units.

6. (currently amended) A stereophonic sound field reproducing apparatus for reproducing a stereophonic sound field, the apparatus comprising:

a plurality of sound wave output units arranged around a head of a user at the time of using, each of the sound wave output unit receives signals and outputs sound waves; and

a first signal processing unit which processes signals to be supplied to the sound wave output units so as to ~~simultaneously~~ correct the signal based on ~~[[the]]~~ characteristics between the sound wave output units and the head of the user ~~and the characteristics between the sound wave output units,~~

wherein at least eight sound wave output units are provided, the eight sound wave output units are arranged in the vicinity of the ears of the user in such a manner that at least four sound wave output units are provided in the vicinity of each ear, ~~[[and]]~~

the four sound wave output units provided in the vicinity of each ear are provided in such a manner that they are positioned at apexes of a triangular pyramid, and

wherein the characteristics include cross-talk components.

7. (currently amended) The stereophonic sound field reproducing apparatus according to claim 1, wherein the first signal processing unit ~~simultaneously~~ corrects characteristics between all of the sound wave output units and the head of the user and characteristics including cross-talk components at a plurality of positions between the ear of the user and ~~between all of the sound~~ wave output units.

8. (currently amended) A stereophonic sound field reproducing apparatus for reproducing a stereophonic sound field, the apparatus comprising:

a plurality of sound wave output units arranged around a head of a user at the time of using, each of the sound wave output unit receives signals and outputs sound waves; and

a first signal processing unit which processes signals to be supplied to the sound wave output units ~~so as to simultaneously~~ correct the signal based on ~~[[the]]~~ characteristics between the sound wave output units and the head of the user ~~and the characteristics between the sound wave output units,~~

wherein, out of the sound wave output units, a desired number of sound wave output units are provided in the vicinity of one ear of the user and the remaining sound wave output units are provided in the vicinity of the other ear, and

the first signal processing unit includes,

a third signal processing unit which corrects characteristics between all the sound wave output units corresponding to the one ear and the head of the user ~~and characteristics between all the sound wave output units corresponding to the one ear;~~ and

a fourth signal processing unit which corrects

characteristics between all the sound wave output units corresponding to the other ear and the head of the user ~~and characteristics between all the sound wave output units corresponding to the other ear,~~ and

the third and fourth signal processing units execute the signal process simultaneously, and

wherein the characteristics include cross-talk components.

9. (cancelled)

10. (previously presented) The stereophonic sound field reproducing apparatus according to claim 1, wherein each of the plurality of sound wave output units are arranged around each ear of the head of the user based on a position of a plurality of corresponding sound input units.

11. (cancelled)

12. (cancelled)

13. (cancelled)

14. (cancelled)

15. (new) The stereophonic sound field reproducing apparatus according to claim 1, wherein the cross-talk components are created by the sound wave output units.